

REMARKS/ARGUMENTS

The 4/22/05 Office Action rejected previously pending claims 1-9. The rejection of the pending claims 1-8 is respectfully traversed. Claim 9 is canceled without prejudice to adding the same or similar claim during possible subsequent prosecution, or through filing of a continuation application. Following the above amendment claims 1-8 remain pending in this application.

Claims 1-8 of the application were rejected under 35 USC §102(b) as being anticipated by US Patent No. 5,944,748 (the '748 patent). Claims 1, 2, 4 and 6-8 were also rejected as being anticipated by US Patent no. 6,063,108 (the '108 patent).

General Overview of Illustrative Embodiments of the Present Application:

At a summary level it is noted that an embodiment of the present invention provides for an array of LEDs. A controller is provided which controls a power supply that is coupled with the array LEDs. The controller is operative to control the power supply such that the different areas of the LEDs are driven differently depending on the melanin content of the skin with is proximate to a particular LED or group of LEDs. The operation of an embodiment of the invention provides for light treatment from the array of LEDs, where different intensities of light are provided to different areas skin, based on the melanin content of the skin, and as a result of the different light intensities, a more even skin coloration results after application of the treatment.

The above discussion is provided for background information and specific elements and limitations of various claims are discussed in more detail below.

Over of the '748 Patent and the '108 reference:

At the outset it is noted that neither the '748 patent, nor the '108 reference have any references to driving LEDs based on the melanin content of skin. Indeed, neither of the references provides any discussion regarding driving different LEDs in an array differently so as to provide for more even coloration of the skin. A thorough review of the both of the references shows that neither reference even uses the word "melanin". Further, neither reference appears to provide any teaching regarding using light treatments to provide for skin coloration treatments.

The '748 patent teaches a device which is used to treat abnormal lesions in tissue. The '748 Patent col. 1: lines 18-22. In connection with Fig. 6 of the '748 patent, which is the referred

to in the Office Action, the '748 patent describes an operation where a photosensitizer is applied to the skin. The photosensitizer concentrates in tumors, and the tumor with the higher concentration of photosensitizer will fluoresce to a substantially greater degree than the surrounding normal tissue. The '748 Patent col. 16:1-5. The '748 patent then goes on to state:

Thus, by applying the excitation light and detecting the resulting fluorescence, the device measures a characteristic of the tissue overlying the location of each photocell 443 and provides signals indicating the presence or absence of the malignant lesion overlying each such location. A signal indicating a relatively high degree of luminescence indicates the presence of a lesion whereas a signal indicating a relatively low degree of luminescence indicates the absence of the lesion. The device controls the treating LEDs 424 to apply treating light only at those regions of the surface adjacent to those locations where the photocell signals indicate the presence of the lesion.

The '748 Patent col. 16:5-15. It is respectfully submitted that the teaching of the '748 patent is very different than a system which drives LEDs based on an amount of melanin in different areas of skin.

The '108 patent teaches a system which can include an array of optical diodes. It appears that a controller determines which diodes are turned on, and which are not, based on a protocol selected by a user. The '108 patent, for example, discusses enabling, or disabling, a unit to allow a user to select from different protocols. See e.g. the '108 Patent col. 25:6-13. The operation appears to provide that in accordance with different selected protocols, different light treatments are provided, which could include turning on different patterns of LEDs. The light protocol is intended to provide some therapeutic effect to the patient such as providing for treating ulcers, wounds, whiplash, muscle spasms etc. See, e.g., the '108 patent col. 21 table 9. However, it is respectfully submitted that none of the teaching in the '108 patent appears to be remotely related to the idea of controlling the driving of a plurality of light emitting devices based on the melanin content of different sub-areas of tissue being treated by the array.

Indeed the teaching of the '108 Patent appears to be directed to the general treatment of a range of different ailments, and suggests that application of light energy may provide an effective treatment. However, the particular pattern of LEDs which are turned on in accordance with the Figs. 11 and 12 of the '108 patent, do not have any relation to the melanin content, or pigmentation of the patients tissue.

Discussion of the Pending Claims:

Claim 1 recites among other things:

a controller coupled to the driver circuit which controls the driver circuit to drive the different regions of light emitting devices to output different intensities of light treatment to the different sub-areas of the patient's tissue, wherein the controller operates to control the driver circuit to drive the different regions to output different intensities of light treatment to different sub-areas based on the different levels of melanin in the different sub-areas.

It is respectfully submitted, neither the '748 Patent, nor the '108 Patent, contain any discussion related to the idea of device where a controller is operable to control a driver circuit to drive different regions LEDs to output different intensities of light based on different melanin levels in different sub-areas of tissue.

It is noted that Office Action takes the position that the structure of the device in the '748 patent, particularly the device shown Fig. 6 of the '748 patent, is the same structure as that recited by claim 1. However, it is respectfully submitted that the structure of the controller and the power supply of claim 1, where the controller operates to control the power supply so that it drives the light emitting devices to provide for light treatment based on melanin content, is entirely different than any device suggested in the '748 patent. For example, the '748 teaches driving LEDs based on a detected fluorescence to treat tumors in skin, where the tumors have absorbed a photosensitizing material applied to the skin.

In contrast in the device of claim 1, the driver circuit is controlled to drive the light emitting devices to provide for different light output by different regions of light emitting devices based on a melanin content in the skin. It is respectfully submitted that there appears to be no teaching in either of the '748 patent or the '108 patent which would suggest such a device. Thus, it is respectfully submitted that claim 1 is patentable, and its dependent claims are patentable over the references.

In addition to the above discussion regarding claim 1, it is noted that the many of the dependent claims contain additional elements, which further support the patentability of the claims. For example, **claim 3** specifically recites that sensing devices that detect light reflected from different sub-areas of tissue, and based on the reflected light some regions of light emitting devices **are driven to induce tanning**, and some areas of light emitting devices are not driven to induce tanning.

Conclusion

For the reasons set forth above, it is believed that all claims present in this application are patentably distinguished over the references, and in condition for allowance. Therefore, reconsideration is requested, and it is requested that this application be passed to allowance.

Respectfully submitted,

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